

Responses to MDNR's September 1, 2015 Additional Comments  
on the Responses to Comments on the  
Work Plan for Additional Characterization of the  
Extent of Radiologically-Impacted Material in Areas 1 and 2  
dated July 31, 2015

Original Comment Number 2.a.:

Task #2, third paragraph, page 3: The first sentence states, "In the unlikely event that a major precipitation event were to occur after clearing of vegetation but before placement of the geotextile and road base material at a location(s) with a potential for erosion and runoff transport of eroded soil to one of the perimeter drainage ditches, one or more sediment samples may be obtained."

- a. It is recommended that sediment samples be obtained regardless of timing of precipitation events to placement of geotextile. It is important to confirm that there is no offsite migration given past occurrences on the AAA Trailer property and rutting of RIM during construction of the fence along the northern edge of Area 1.

The response to our comment states that sediment sampling would only occur if a major precipitation event were to occur after the vegetation had been cleared but before the geotextile and road base materials have been placed. Again, we reiterate our request that sediment sample be obtained regardless of the timing of precipitation events relative to placement of geotextile.

**Response:** *Collection of sediment samples was only proposed as a method to address the potential, however unlikely, that a major precipitation event with a potential to cause erosion and subsequent transport of soil were to occur after the vegetation were removed but before the geotextile has been emplaced. Collection of sediment samples for other purposes, such as those described in this additional comment, are beyond the scope of the activities requested by EPA for the additional characterization of the extent of RIM in Areas 1 and 2.*

Original Comment Number 2.c.:

There are state and federal regulations regarding stormwater permits for landfills (see 10 CSR 20-6.200(2)(B)3.B and 40 CFR 122.26(a)(14)(v)) (note: correct citation is 40 CFR 122.26(b)(14)(v)). According to these regulations, a stormwater permit is required for "landfills, land application sites and open dumps that receive or have received any industrial wastes...". The 2000 Remedial Investigation Report for Operable Unit 1, Section 3.2, states, "Beginning in the early 1950s or perhaps the late 1940s, portions of the quarried areas and adjacent areas were used for landfilling municipal refuse, industrial solid wastes and construction demolition debris." These regulations require issuance of a stormwater permit regardless of land disturbance permit requirements. Please include provisions in the Work Plan for acquisition of the appropriate stormwater permit(s).

As stated in the original comment, state and federal regulations apply to landfills and open dumps that received any industrial wastes. According to the Remedial Investigation Report, Operable Unit 1

contains landfills that received industrial waste. Regardless of vegetative clearing activities, these regulations are considered Applicable or Relevant and Appropriate Requirements (ARAR) for onsite Comprehensive Environmental Compensation, Response, and Liability Act (CERCLA) actions or may require a permit for offsite discharges. Again, we request that the Respondents submit the required information to ensure substantive requirements can be developed. Please identify the relevant outfalls and a list of site related contaminants of concern for OU1 and any other applicable areas of the site. We also request provisions be included in the Work Plan for acquisition of the substantive requirements or permit(s).

**Response:** *Operable Unit-1 of the West Lake Landfill has been and continues to be the subject of evaluation of potential remedial actions which will include a determination of stormwater management requirements. Evaluation of the requirements of stormwater permitting for solid waste landfills is beyond the scope of the activities requested by EPA for the additional characterization of the extent of RIM in Areas 1 and 2.*

Original Comment Number 6:

Task #6, page 5: The last sentence states, "The purpose for collection of TAL metals, transition metals (e.g., Scandium, Niobium and Tantalum), and Sulfate, Carbonate and Fluoride is to provide multiple lines of evidence to delineate and differentiate radiological constituents associated with leached barium sulfate residue ("LBSR") disposed of at the site from radiological constituents associated with other waste materials and/or naturally occurring radionuclides. Please explain in more detail the purpose and significance for adding these constituents to the sampling analyte list.

The response to this comment, which is also a response to EPA Specific Comment Number 3, does not address the question of how analytical results for the chemicals will be used to differentiate non-LBSR material. Please explain in the Work Plan, in detail, the purpose and significance for adding these constituents to the sampling analyte list.

**Response:** *Cotter has identified documents suggesting a potential for other waste materials that may have contained radionuclides to have been disposed at the site. These other waste materials may contain certain metals (including the ones identified in the sentence quoted by MDNR, above) and other constituents and characteristics which could be used to help delineate and differentiate other sources of RIM. Please also see the revisions to paragraph 5 of the Field Investigation and Sample Collection and Analysis section of the Work Plan that were made to address Specific Comment No. 3 in EPA's July 31, 2015 comments on the Work Plan that also address this issue.*